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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,460	12/03/2004	Shusaku Yoshida	Q85159	2870
65565	7590	12/15/2006	EXAMINER	
SUGHRUE-265550			GARNER, ONDRIA L	
2100 PENNSYLVANIA AVE. NW			ART UNIT	
WASHINGTON, DC 20037-3213			PAPER NUMBER	
			2834	

DATE MAILED: 12/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/516,460

Applicant(s)

YOSHIDA, SHUSAKU

Examiner

Ondria Garner

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 0123 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 12/03/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Drawings

Figures 4(a), 4(b), and 5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;

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- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morcos et al. (5677963) in view of Nonnenmann (4242606). Morcos teaches in figure 5, a voice

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coil motor 100 of the movable coil type comprising a stator of a permanent magnet 112 which becomes a magnetic field (col. 4, line 40) and a movable element of an armature coil 116, wherein the armature coil is formed into a coil-shape having a cavity portion, a reinforcing beam is formed at a substantial center of the cavity portion. Morcos does not teach the reinforcing beam being made of a non-magnetic material.

Nonnenmann teaches in column 5, line 37 a beam being made of non-magnetic and highly rigid material. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a beam made of a non-magnetic and highly rigid material for its acoustic and high strength properties.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morcos et al. (5677963) in view of Lathrop (3659124). Morcos teaches in figure 5, a voice coil motor 100 of the movable coil type comprising a stator of a permanent magnet 112 which becomes a magnetic field (col. 4, line 40) and a movable element of an armature coil 116.

Morcos teaches all of the claimed features as discussed above. Morcos does not teach a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil. Lathrop teaches in figure 6, a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a highly rigid reinforcing member to minimize the working temperature of the armature.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morcos et al. (5677963) and Lathrop (3659124) in view of Nonnenmann (4242606). Morcos teaches in figure 5, a voice coil motor 100 of the movable coil type comprising a stator of a permanent magnet 112 which becomes a magnetic field (col. 4, line 40) and a movable element of an armature coil 116, wherein the armature coil is formed into a coil-shape having a cavity portion, a reinforcing beam is formed at a substantial center of the cavity portion. Morcos does not teach the reinforcing beam being made of a non-magnetic material.

Nonnenmann teaches in column 5, line 37 a beam being made of non-magnetic and highly rigid material. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a beam made of a non-magnetic and highly rigid material for its acoustic and high strength properties.

Morcos teaches all of the claimed features as discussed above. Morcos does not teach a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil. Lathrop teaches in figure 6, a highly rigid reinforcing member, the shape of which is the same as the coil section, is arranged at an end face of the coil. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a highly rigid reinforcing member to minimize the working temperature of the armature.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 20050206245, US 3439198, US 6894408, US 6713904, US 3619673, US 5777403, US 3751693.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ondria Garner whose telephone number is 571-272-8327. The examiner can normally be reached on Monday through Friday, 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



OLG
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